

Title (en)  
PHYSICAL DISTRIBUTION SYSTEM, PHYSICAL DISTRIBUTION METHOD

Title (de)  
PHYSISCHES VERTEILUNGSSYSTEM, PHYSISCHES VERTEILUNGSVERFAHREN

Title (fr)  
SYSTÈME DE DISTRIBUTION PHYSIQUE, PROCÉDÉ DE DISTRIBUTION PHYSIQUE

Publication  
**EP 3539681 A1 20190918 (EN)**

Application  
**EP 19160025 A 20190228**

Priority  
JP 2018047204 A 20180314

Abstract (en)  
A physical distribution system includes first and second conveyance paths, first and second sensors, and a processor. The first sensor detects a package passing along the first conveyance path. The second conveyance path merges with the first conveyance path at a junction. The second sensor detects a package passing along the second conveyance path. The processor counts a first number of packages present in a first convergence monitoring section determined in the first conveyance path upstream the junction, and counts a second number of packages present in a second convergence monitoring section determined in the second conveyance path upstream the junction, determines an order in which packages in the first and second convergence monitoring sections pass the junction, based on the first number and the second number, and control the first and second conveyance paths, such that the packages pass the junction in the determined order.

IPC 8 full level  
**B07C 3/08** (2006.01); **B07C 5/36** (2006.01)

CPC (source: EP US)  
**B07C 3/08** (2013.01 - EP US); **B07C 5/36** (2013.01 - EP US); **B65G 43/10** (2013.01 - US); **B65G 47/493** (2013.01 - US);  
**B65G 47/5104** (2013.01 - US); **B65G 47/642** (2013.01 - US); **B65G 47/681** (2013.01 - US); **B65G 47/70** (2013.01 - US);  
**B65G 47/30** (2013.01 - US)

Citation (search report)  
• [XA] WO 2016026655 A1 20160225 - SIEMENS AG [DE]  
• [XA] WO 2012022866 A1 20120223 - SOLYSTIC [FR], et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3539681 A1 20190918; EP 3539681 B1 20221102; JP 2019156594 A 20190919; JP 7077080 B2 20220530; US 10710812 B2 20200714;**  
US 2019283975 A1 20190919

DOCDB simple family (application)  
**EP 19160025 A 20190228; JP 2018047204 A 20180314; US 201816213122 A 20181207**